

# Nicholas Caro Lopez

Burlington, ON | [LinkedIn](#) | [GitHub](#) | [Website](#)

## EDUCATION

### Toronto Metropolitan University (formerly Ryerson University)

Toronto, ON

*Candidate for Bachelor of Science, Computer Science Co-op*

*Sep 2022 – Present*

- **Concentration:** Software Engineering
- **GPA:** 4.07/4.33, *Dean's List*
- **Relevant Coursework:** Introduction to Software Engineering, Data Structures, Operating Systems I, Web Systems Development, Intro to Unix & C & C++, Probability and Statistics, Linear Algebra

## EXPERIENCE

### Dayforce (formerly Ceridian)

Toronto, ON

*Software Developer Intern*

*May 2024 – Present*

- Mocked user login API calls from a monolithic codebase, ensuring reliable and isolated integration tests for a identity-based microservice

### Toronto Metropolitan University

Toronto, ON

*Software Developer*

*Sep 2023 – Apr 2024*

- Integrated an advanced image-based motion tracking extension into **open-source software**, 3D Slicer
- Cooperated effectively within an **Agile software development team**, optimizing workflow, visualizing progress, and delivering quality software solutions on time
- Engineered the **Backend Logic** of the extension, enabling multi-file deletion and processing within a single session and resulting in **33%** decrease in backend-related bug reports
- Created new graphical user interface functionality, enhancing usability by **28%** through **3D Slicer's Python API**

### RoboThink Northwest Toronto

Burlington, ON

*Teaching Assistant*

*May 2023 – Aug 2023*

- Designed and taught a comprehensive curriculum introducing students to programming in Scratch
- Supported the STEM Teacher in effectively employing RoboThink materials for engaging and interactive lessons
- Enhanced students learning through administrative tasks such as organizing curriculum binders and printouts, improving productivity by **50%**
- Demonstrated attentiveness to individual students, providing personalized support and guidance to enhance their learning experience

## PROJECTS

### [Terrahacks Application Portal](#)

Supabase | NextJS / ReactJS | Tailwind CSS

- Developed an application portal for a **Hackathon**, successfully handling the registration of **200+** participants
- Designed and implemented a forgot password **data flow diagram** with Supabase's **Authentication REST API**
- Streamlined the hacker acceptance/rejection process by leveraging a **SQL JOIN** query integrating data from tables using a **one-to-one relationship**

### Sudoku Solver

HTML | CSS | JavaScript

- Defined an **Event Listener** and **Regular Expression** for capturing and restricting user input to digits 1-9
- Constructed an **interactive, responsive web page** utilizing **CSS Media Queries** and **Flexbox/Grid Layouts** for optimal user experience across various devices
- Employed a **Backtracking Algorithm** to solve every valid Sudoku board inputted by the user and displayed the solution dynamically on the web page

### Simon-Says Memory Game

Java | JFrame

- Incorporated **Object-Oriented Programming** principles such as **Classes, Objects and Inheritance** to create and display items such as the game level and buttons on the graphical user interface
- Applied **Polymorphism** through **Method Overriding** enabling the program to receive the user's mouse clicks and execute certain functions accordingly

## TECHNICAL SKILLS

**Computer Languages:** Python, Java, C, C#, HTML, CSS, JavaScript, Lisp, Perl, PHP, Ruby

**Frameworks/Libraries:** ReactJS, .NET, MySQL, Supabase, Tailwind CSS, Bootstrap, JQuery, PyQt

**Developer Tools:** Visual Studio/Code, Sublime Text, Jira, Trello, Git/GitHub, Unix/Linux

**Spoken Languages:** English, Spanish